Financial Budgeting App

Project Vision Document

Version 1.4

September 26, 2024

Revision History

Revision	Date	Author	Reviewed By	Summary of Changes
1.2	September 18, 2024	Adam Simcoe, Trang Nguyen, Christian Do, Nhan Tran, Nhu Ly	Professor Laily Ajellu	Added the following sections to record: 1-3, 6-7.
1.4	September 26, 2024	Adam Simcoe, Trang Nguyen, Christian Do, Nhan Tran, Nhu Ly	Professor Laily Ajellu	Updated Revision History, Document Approval List, and added sections 4 and 5.

Document Approval List

Version	Approved By	Signature	Date
Project Summary	Professor Laily Ajellu		September 12th, 2024
Minutes of Meeting	Professor Laily Ajellu		September 26th, 2024
High Level Requirements	Professor Laily Ajellu		September 19th, 2024

Document Distribution List

Version	Name of the Receiver/Group	Date
1.4	Adam Simcoe, Trang Nguyen, Christian Do, Nhan Tran, Nhu Ly	September 26, 2024

Table of Contents

1   Introduction

BUDGET BOSS has created this project vision document to serve as a high-level overview of the proposed financial budgeting application. Designed to simplify personal finance management, BUDGET BOSS will allow users to have an intuitive and user-friendly experience with their money. This document will serve to outline the project's key objectives, such as the purpose, scope, and positioning of the project. By providing a proper reference in regards to the project's lifecycle, this document will ensure that stakeholders and users remain aligned with the project's expected outcome and its overall long term vision.

1.1   Purpose

The purpose of this document is to provide a clear and concise framework for the development of the financial budgeting application. The focus will be on outlining the project's objectives, defining the target audience, and highlighting any key functionalities within the scope of the app. Additionally, this document will serve as one of the methods of communication between stakeholders and the project management team throughout the development process. This will ensure that the app's vision is clearly communicated and implemented at all levels.

1.2   Scope

Scope refers to the boundaries and goals of the project. The scope highlights what the project will deliver, such as its features, and outcomes of the development cycle. In scope refers to deliverables that will be included in the project, whereas out of scope refers to potential related features that will not be a part of the project as of version 1.0 of this document.

1.2.1   In Scope

- Dashboard for tracking income and expenses.
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- Tools to help create and manage a budget.
- Notification system for reminders about user-set saving goals.
- Data visualization such as graphs and charts to present expense/saving patterns.
- Profile system to allow users to register and save their information accordingly.
- API integration for potential Ontario tax service integration.

1.2.2   Out of Scope

- Tax filing assistance or other financial advisory functionalities.
- International currency support and exchange rates.
- Integration with other investment platforms or potential stock trading functionalities.
- Integration with end-users banking account.

- Corporate financial management features. Definitions, Acronyms, and Abbreviations

This section explains all of the terms and abbreviations that are being used in this document, for those who are unfamiliar with them. Not everybody who reads this document will understand all of the terms, so this section is helpful.

Term	Explanation
App	Abbreviation for the word application.
Scope	Refers to the boundaries of the expected features of the project. See section 1.2 for a more detailed breakdown.
End-User	Refers to a person who will be using the product/application upon its completion.
API	Acronym for Application Programming Interface - a software interface that allows two applications to communicate with each other.

1.3 References

Reference File Name	Version	Description
Chart Types: Features, Uses, Advantages and Disadvantages	N/A	A concise report of the different kinds of charts/graphs, and which are the most effective at representing specific types of finance models.
StatsCan - Canadians are unable to cover an unexpected expense	Feb 13 2023	StatsCan studies reveal that many Canadians are unable to cover an unexpected expense as low as $500. This highlights a critical need for tools that help users build emergency funds and manage financial stress before unexpected problems arise.
CNBC - Budgeting is restrictive and is not a one size fits all solution	Jan 2 2024	CNBC challenges the traditional approach to budgeting, arguing that rigid budgeting frameworks can feel restrictive and may not suit everyone's financial situation. Emphasizing the importance of providing users with flexible budgeting options that suit individual financial circumstances and offering a modern solution.

Reference File Name	Version	Description
Canada Gov - Tips for improving financial health		Advice for improving financial health, including reviewing your budget, creating a debt repayment strategy, saving daily, and avoiding risky payment plans. Offering financial fundamentals to help users create a personalized financial plan.
Northwestern Mutual - Financial Planning "uncomfortable"		People often find it uncomfortable to put actual numbers down and discuss their finances with others. Our modern solution makes financial planning easy and intuitive, allowing users to manage their finances independently and avoid the awkwardness of personal discussions.

This section also contains links to all other places that were referred to in this document. These may include:

- *Web sites*

- *URLs or network locations*

- *Research done for similar products*

Name	Link
Chart Types: Features, Uses, Advantages and Disadvantages	https://www.strike.money/technical-analysis/chart-types
StatsCan - One in four Canadians are unable to cover an unexpected expense of $500	https://www150.statcan.gc.ca/n1/daily-quotidien/230213/dq230213b-eng.htm
CNBC - Here's why budgets don't work for a lot of people	https://www.cnbc.com/select/why-budgets-dont-work-for-people/
Canada Gov - Money tips to improve your financial health	https://ised-isde.canada.ca/site/office-superintendent-bankruptcy/en/you-owe-money/money-tips-to-improve-your-financial-health
Northwestern Mutual	https://news.northwesternmutual.com/2018-12-11-Northwestern-Mutual-Study-Finds-40-Of-Americans-View-Financial-Planning-Like-A-Medical-Checkup-Not-Fun-But-Necessary

2 Positioning

2.1 Business Opportunity

This project addresses the growing demand for simple and effective personal finance management tools. Many individuals find existing budgeting solutions too complex, making it difficult to manage their finances. BUDGET BOSS aims to capitalize on this opportunity by offering a user-friendly tool that helps users easily track expenses, set financial goals, and manage their budgets, ultimately supporting better financial control and stability. Additionally, if time constraints allow, the application could expand to include tax services for users in Ontario, further enhancing its value.

2.2 Problem Statement

The Problem of	managing personal finances with complex and unintuitive tools
affects	individuals seeking to improve their budgeting and financial planning
the impact of which is	difficulty in tracking expenses, setting financial goals, and maintaining overall financial control
a successful solution would be	an intuitive, user-friendly application that simplifies budgeting, tracks expenses, and potentially provides tax services for Ontario users, helping individuals achieve better financial stability and control.

Table 1 Problem Statement

2.3 Product Position Statement

For	Individuals who want to manage their finances effectively.
Who	Struggle with tracking expenses, managing budgets, and making informed financial decisions.
The <product name>	Is a personal finance management tool.
That	Provides real-time expense tracking, budget planning, and financial insights to help users stay on top of their finances.
Unlike	Generic spreadsheet solutions or complex accounting software
Our product	Offers an intuitive user interface, automatic categorization of expenses, and actionable insights, making budgeting easier and more accessible for everyone.

Table 2 Product Position Statement

2.4 SWOT Analysis

<Reference: https://www.businessballs.com/strategy-innovation/swot-analysis/)

Strengths	Weaknesses
User-friendly interface: Easy navigation for users with minimal financial knowledge.	**Limited advanced features for professionals:** May lack depth for advanced users looking for professional-grade tools.
Automated calculations: Automatically calculates date milestones to meet target financial goals.	**Heavy reliance on user engagement:** Continuous manual input required for income/expense tracking.
Visual data representation: Offers visual graphs for clearer understanding of financial data.	**Data security concerns:** Users may hesitate to provide financial information due to privacy worries.
Tailored recommendations: Provides personalized budgeting suggestions based on user data.	**Development complexity:** Advanced features like automated calculations and personalized insights increase development time and costs.
Opportunities	Threats
Enhanced personal finance management: Streamline personal finance management through an app that offers clarity, simplicity, and tailored advice.	**High competition:** Existing apps like Mint or YNAB may offer similar features with strong brand loyalty.
Growing demand for financial literacy tools: More people are looking for tools that help them manage their finances better.	**Security concerns:** Risk of data breaches could affect trust, especially as users share personal financial data.
Integration with external financial data sources: Opportunity to link with banks for seamless transaction importing and tracking.	**Changing financial regulations:** New regulations may impact how financial data can be collected or used.
Subscription model for premium features: Offer advanced features such as goal-setting, milestone tracking, and enhanced visual insights through a paid subscription.	**Economic downturns:** Users may reduce discretionary spending, including app subscriptions, during tough financial times.

3   Stakeholder and User Descriptions

< This section provides a profile of the stakeholders and users involved in the project, and the key problems that they perceive to be addressed by the proposed solution. It does not describe their specific requests or requirements as these are captured in a separate stakeholder requests artifact. Instead, it provides the background and justification for why the requirements are needed>

3.1   Stakeholder Summary

< There are a number of stakeholders with an interest in the development and not all of them are end users. Describe and list the project stakeholders>

Stakeholder Name	Represents	Role
Requirements Engineers	System Analysis	This stakeholder works with customers and stakeholders to translate needs into requirements. Specifies domain, non-functional, and functional requirements. Refines requirements as needed.
Project Manager	BUDGET BOSS	Oversee the entire project lifecycle, ensure timelines and goals are met.
Development Team	Application Development	Design and develop the application, fix bugs, and roll out updates. Maintain system infrastructure, manage servers, and provide technical support.
End Users	Customers of BUDGET BOSS	Provide feedback on user experience and usability, helping to refine app functionality and features
Marketing Team	Company Branding and Promotions	Ensure the application aligns with the company's vision and values, help promote and onboard users.
Financial Team	Company's Financial Operations	Provide insights into financial workflows, review the system for accuracy, and ensure the app meets financial compliance.

Table 3 Stakeholder Summary

3.2   User Summary

< Present a summary list of all identified users of the system >

User Name	Description	Responsibilities	Stakeholder
Personal Budgeter	**Individual users of the application**	**Track their own expenses, set reminders, and generate financial reports.**	**End Users**
Finance Team	**Provides financial advice or management services**	**Analyze client budgets and spending patterns, assist with financial planning, and generate reports.**	**Finance Team**
Development Team	**Handles user queries and troubleshooting**	**Assist users with technical issues and provide guidance on how to use the app.**	**Development Team**

Table 4 User Summary

4 Stakeholder Requirements

< Categorize and list the requirements from the perspective of the business stakeholder and potential system users >

ID	Requirement	Stakeholder
1	A requirements engineer is required to define specific requirements related to the app's functionality.	Requirements Engineers
2	A project manager is required to see progress reports at different development stages.	Project Manager
3	A development team is required to have a clear development and support plan.	Development Team
4	An end user is required to visualize and input all their financial details on a dashboard that updates in real-time.	End Users
5	The marketing team requires a multi-channel presence across social media, email, search engines, and traditional media.	Marketing Team
6	The financial team is required to guide the development of financial planning features by providing expertise on budgeting, forecasting, expense tracking, and goal setting to ensure accuracy and relevance to users' financial needs.	Financial Team

Table 5 Stakeholder Requirements

5 System Features

< List and briefly describe the system features. Features are the high-level capabilities of the system that are necessary to deliver benefits to the users. Avoid design. Keep feature descriptions at a general level. Focus on capabilities needed and why (not how)
they should
be implemented >

ID	Feature	Stakeholder Requirement ID
000	Visual engaging graphs or charts that make complex financial data more understandable.	3, 6
100	Implement features that automatically calculate important milestones leading up to a target date. This can be used for tracking saving goals for vacation, paying off debt, etc.	3, 6
200	Offer a user-friendly platform that simplifies personal finance management by integrating budgeting, expense tracking, and savings tools in one streamlined app.	3
300	Simplified input tools for setting goal targets, adding incomes and expenses.	4
400	Notification system to alert users. (Eg: user exceeding their budgets for a specific category)	3
500	Classify Expense Category allows users to specify custom categories or use predefined ones.	3

ID	Feature	Stakeholder Requirement ID
600	User Profile allows for creating and updating users information and preferences.	4
700	Clear Dashboard to display users progress	3
800	Simplified Navigation to easily access desired sections and tools.	3
900	Ability to generate monthly progress reports	2

Table 6 System Features

6 Assumptions

<
List all assumptions made about any of the content provided in this document.
Assumptions should be applicable to the scope, desired solution, requirements,
business process, and stakeholders
>

- End-users will be individuals looking to manage personal finances, not businesses or corporations.
- End-users will have access to smartphones or tablets with internet connectivity.
- End-users will regularly interact with the app to track their finances and set savings goals.
- The necessary technology (hardware and software) will be accessible and compatible with project requirements.
- The Ontario tax service API and the budget API (YNAB) will be available and stable for integration.
- The identified project deliverables align with the project's objectives.
- All stakeholders have provided their recommendations and requirements, and there will be no significant changes to stakeholder expectations during the project.
- The project schedule will be achievable within the allocated timeframes.
- Task dependencies will be accurately identified.
- The project team will have sufficient time and resources to complete all project deliverables.
- The project deliverables will meet or exceed the quality standards.
- Stakeholders will provide timely feedback throughout the project.

7   Constraints

<List
any process constraints, external constraints or other dependencies
>

- Development and maintenance costs must remain within the allocated budget. Any expenses exceeding this limit require Project Manager approval to ensure financial responsibility.
- The project must be completed by the specified deadline, with timely communication about any delays in development phases to assess impacts on the timeline.
- The app will use a predefined technology stack, including React, Node.js, and MongoDB. Changes to this stack need thorough review and approval to avoid compatibility issues.
- The project relies on the availability of skilled team members. If a critical member is unavailable for over one week, the timeline and workload must be reassessed to prevent delays.
- The initial release will include core budgeting features like income tracking and data visualization. Changes to this feature set must be agreed upon by all team members to avoid impacting the project timeline.
- Timely access to third-party APIs is essential. Any downtime or changes in these services could directly impact the app's core budgeting features.
- Development must follow Agile methodology, requiring bi-weekly sprint reviews and daily stand-ups to ensure alignment and quick adaptation to changes.
- The project must comply with data protection regulations such as GDPR, ensuring secure handling of user data to avoid legal issues.